

Amendments to the Specification:

Please replace the paragraph beginning on page 1, line 4, with the following:

--Reference is made to commonly assigned, co-pending U.S. Patent Application Serial Number 10/086,087 _____ by Yang et al., (Docket 83426 filed of even date herewith entitled "DNA Sequencing and Gene Identification".

Please replace the paragraph beginning on page 6, line 30, with the following:

--Large DNA molecules, like all macromolecules, have a random coil configuration under a non-perturbed condition. Many methods are known for stretching DNA molecules from a random coil configuration to a linear state. For example, DNA molecules may be stretched using a mechanical means such as applying a microscopic hydrodynamic force generated by microfluidic flows. These flows can be generated in simple microfluidic devices either via electrophoretic, electro-osmotic, or pressure-driven. When a large DNA molecule in solution passes with an elongational flow associated with acceleration of the fluid from a reservoir into a microfluidic channel, the DNA molecule can be oriented and stretched into linear state for at least a fraction of a second, as more fully described in copending U.S. Patent Application Serial Number 10/086,087

referred to above (Docket 83426).--